

# **Progress Review for Pennsylvania Department of Environmental Protection Nonpoint Source Pollution Program - FY11**

## **Introduction**

The Environmental Protection Agency (EPA) Region III has determined that the Pennsylvania Department of Environmental Protection (PADEP) has achieved satisfactory progress with their Nonpoint Source (NPS) Pollution Management Program in Federal Fiscal Year 2011 (FFY11) as required by Section 319(h)(8) of the Clean Water Act.

As the lead agency responsible for Pennsylvania's NPS pollution management program, PADEP manages and coordinates the implementation of a wide range of activities to address this problem. The primary objective for Pennsylvania's NPS management program is to consolidate the Section 319 requirements into a program that effectively reduces and prevents non-point source pollution. To accomplish this, PADEP has adopted long term goals (greater than 5 years) and short term objectives (five years or less) as outlined in Pennsylvania's Nonpoint Source (NPS) Management Program - 2008 Update (Management Plan).

A summary of the five key goals of Pennsylvania NPS program are:

- 1) remove 500 stream miles and 1,600 lake acres from the list of impaired waters,
- 2) develop and implement 34 watershed plans meeting 319 criteria,
- 3) improve monitoring to determine water quality improvements and load reductions,
- 4) develop and use new technology and tools to address NPS, and
- 5) implement appropriate best management practices to restore water quality.

Pennsylvania's NPS Program continues to mature and focus more on implementing Watershed Implementation Plans (WIPs) to meet TMDL pollutant load reduction goals. Most of Pennsylvania's 319 funding is now being applied to restoration in targeted watersheds where the WIP has been accepted by EPA or is under development. Pennsylvania's primary goal is to address streams and lakes that are documented as impaired and have an approved TMDL. To date, 33 Watershed Implementation Plans have been completed toward the target goal of 34. An additional three WIPs are being developed using non-319 funds and are under review by Region 3 EPA's program office.

WIP implementation to date, has in part, resulted in the removal of 105 miles of streams from the Integrated List and 1,859 lake acres, exceeding the goal for lake restoration. Sixteen of the stream miles removed from the impaired waters lists have not yet met the criteria for an EPA success story but the state is confident that an acceptable success story will be completed in 2012.

## **Resources and Funding**

To implement Pennsylvania's NPS pollution control programs, PADEP has delegated much of the responsibility for watershed planning and restoration efforts to the Regional PADEP offices through the Watershed Managers staffed at each of the six PADEP regional offices. To further facilitate program implementation, the Commonwealth provides funds to Conservation

Districts for Watershed Specialists in 66 of 67 PA counties. For FFY2011, this resulted in \$1,325,866 for the 319 grant match. This has increased the availability of technical and programmatic assistance to the public for developing restoration work plans and funding grant applications.

Pennsylvania has received over \$100 million dollars in 319 funding since FY 1991. In FY2011, Pennsylvania's grant award was \$5,003, 815 representing a 12% reduction from 2010 due to federal agency budget cuts.

Many different sources of funding and partners have supported Pennsylvania's Nonpoint Source program including over \$200 million through the Environmental Stewardship and Watershed Protection Act (Growing Greener) since 1999. Growing Greener II, a \$625 million bond program, will restore or improve approximately 1000 acres of wetlands, improve 1100 miles of riparian areas via buffers, and improve 250 abandoned mine drainage impacted streams. In 2011, \$8.1 million from the Environmental Stewardship and Watershed Protection Act (Growing Greener) supported the Nonpoint Source program. The combined funds from the 319 and Growing Greener leveraged \$6.7 million in outside investments to support the nonpoint source program.

Examples of this investment include:

Improving nearly 30,000 linear feet of streambank

Treat more than 144 million gallons of AMD each year

And address polluted runoff coming from 77 farms throughout the Commonwealth

In 2010, the DEP partnered with PENNVEST to develop a non-point source (NPS) funding program to provide a 20% set-aside of the State Revolving Loan fund monies for "green infrastructure". This program addresses four primary sources of NPS pollution: agriculture, abandoned mine drainage, urban runoff and brownfields. In 2011, PENNVEST awarded \$22,525,997 to non-point source projects in the form of either grants or low interest loans.

Between 1986 and 2011, the PA Chesapeake Bay Program has overseen the installation of over \$66 million worth of BMPs of which \$45 million were government funds and \$21 million were landowner funds. These BMPs include more than 1,000 manure storages, over 220 barnyard runoff control systems, 129 miles of streambank fencing, and 4,000 acres of conservation tillage.

The current Chesapeake Bay Implementation (2009-2011) grant will fund the installation of 4,000 acres of no-till planting, 9,000 acres of cover crop, and 5 miles of streambank stabilization, as well as many other nonpoint source BMP's.

Through the PA DEP's Bureau of Abandoned Mine Reclamation (BAMR), eight Growing Greener grants and seven PA DEP 319 grants were awarded for AMD. BAMR completed 37 projects, 15 of which was surface reclamation, one passive treatment systems and the remaining 21 projects included mine subsidence control and deep mine reclamation. BAMR also reclaimed 755 acres. In addition, DEP's Bureau of Oil and Gas plugged 180 abandoned wells.

## **Annual Report - Monitoring, Measuring and Administrative Accomplishments**

Pennsylvania recently submitted their Nonpoint Source Annual Report with a summary of progress made during the FFY10 time frame (October 1, 2009 through September 30, 2011). The Annual Report measured improvements in water quality; NPS load reductions, implementation of non-point source controls, education and outreach efforts. During FFY 2011, five waterbodies were identified as having achieved substantial improvements in water quality. Two of these water bodies have been determined to be fully restored and have been removed from the State's 303(d) impaired streams list. Water quality improvements in the remaining three water bodies include two AMD-impaired streams and one agriculturally impaired stream.

Of note this year is the improvement in lakes. The 2012 Integrated Report will show that the number of lake acres listed under Category 1 has doubled from 3002 acres in 2009 to 6432 acres in 2011.

### **Abandoned Mine Drainage Pollutant Load Reduction Estimates**

<b>Iron</b> (lbs/day)		<b>Aluminum</b> (lbs/day)		<b>Manganese</b> (lbs/day)		<b>Acidity</b> (lbs/day)	
FFY2010	FFY2011	FFY2010	FFY2011	FFY2010	FFY2011	FFY2010	FFY2011
407	245	31.7	32.5	21.2	7.0	617.6	175.2

### **Nutrient and Sediment Pollutant Load Reduction Estimates**

Source: PA NPS Annual Report FY11

<b>Nitrogen</b> (lbs/year)		<b>Phosphorus</b> (lbs/year)		<b>Sediment</b> (tons/year)	
FFY2010 Reductions	FFY2011 Reductions	FFY2010 Reductions	FFY2011 Reductions	FFY2010 Reductions	FY2011 Reductions
8,126	27,254	2,129	6,041	1,627	3,137

Pennsylvania's Section 319 Program is currently engaged in Phase III of its Watershed Implementation Planning process, begun in FFY 2004. Thirty-three Watershed Implementation Plans (WIPs) have now been prepared and accepted by the EPA under Phases I, II and III of this process. Under Phase III, four more plans are being developed, three of which are using non-319 funds. All, but one, of the completed WIPs are currently being implemented.

All NPS grants through 2007 are closed. PA requested a one-year no cost time extension

for grant #C9-003498-08 which was approved. The grant period will end on September 30, 2012.

PA has over 98% of their completed projects geo-located and linked to load reductions, 84% of completed projects have been accepted by EPA and 100% of the projects have appropriate project evaluations. The remaining projects are all on schedule. Pennsylvania continues to be in the forefront for ensuring their projects are spatially tagged using WebRIT. Upon reviewing information in the Financial Data Warehouse, PADEP is spending funds at a satisfactory rate.

For 2011, Pennsylvania reported progress on 10 watershed implementation plans. In 2009, EPA recommended that for each WIP, a summary of best management practices implemented in the watershed that help to achieve the stated goals in each WIP, be included in the annual report. This summary has been facilitated by the use of the WIP Tracker. Pennsylvania has committed to detailed reporting on 10 WIPs in 2012. We can now track progress toward achieving *watershed* improvement as a result of implementing activities identified in the plans.

### **Success Stories**

Pennsylvania's Annual Report highlighted two Success Stories, Pierceville Run and a 17 mile stretch of the Lehigh River. Three new improving watershed stories were reported for 2011: Hubler Run, Mill Creek, and Six-mile Run as result of restoration efforts in collaboration with local sponsors, and partners. Hubler Run and Six-mile Run are located in abandoned mine drainage impaired watersheds. Mill Creek is located in an agricultural impaired watershed in Lancaster County. For each story, there is evidence that the water quality is improving. Data analyses from additional monitoring may indicate that indeed, these waters are meeting water quality standards and de-listing could occur.

### **Recommendations/Future Actions**

The overall 319 grant award process improved in 2011 and continues to be more efficient as the Growing Greener and 319 project solicitation and review process become more independent.

Pennsylvania has worked extensively with project sponsors and watershed specialists over the past few years to ensure that good project proposals are submitted that respond to the needs identified in the watershed implementation plans.

We encourage Pennsylvania to continue drawdown their grant funds in a timely manner and to seek efficiencies in their own processes such as permitting, to lessen project delays.

We are especially pleased by PA's use of the Watershed Plan tracker and the willingness to work with EPA staff to populate and ultimately use the information to 'track and report' on WIP implementation.

We request that Pennsylvania begin to review the open projects under FY09 and FY10 to determine if a no cost time extension request should be considered.

## **Conclusion**

The goals and objectives identified in Pennsylvania's Management Plan continue to guide program activity and serve as a basis for determining funding priorities of Section 319 nonpoint source grant programs and projects. PADEP also has a strong record of commitment for grant reporting through annual reports and semi-annual progress reports, as well as GRTS to document project evaluations, tasks and measurable environmental results. PADEP continues to effectively leverage other state, federal and local programs to restore water quality throughout the Commonwealth. The *Pennsylvania Nonpoint Source Management Program - 2011 Annual Report* describes the progress made by the Commonwealth during FFY11 in implementing this plan.

SGM s/s 4/10/2012  
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